

To be inserted following "Chapter 8: Natural Resources"; existing "Chapter 9: Implementation Strategy" will become Chapter 10, and subsequent chapters will follow suit.

CHAPTER 9: SAND & GRAVEL RESOURCES

Introduction

Sand and gravel are important natural resources found throughout Flathead County. While large amounts of gravel are located throughout the Flathead valley, sand is a resource that is more limited in this area of the state. Sand and gravel resources provide the foundation upon which our infrastructure is built, defining where, how and to what extent development occurs. Our roads, bridges and highways are all constructed using gravel; the houses we live in, buildings we work in and sidewalks we walk on utilize the resource as well. Access to local gravel resources reduces costs associated with transportation and processing fees, thereby reducing the overall cost of development. The potential for local extraction of sand and gravel resources also affects the overall economic climate by providing jobs and serving local construction industries. Developing an awareness of where sand and gravel resources are currently located and what types of activities (extraction, processing, and transportation) are occurring in these locations is important for a variety of reasons. Continued growth and development in areas of the County where sand and gravel resources are currently found will result in continued land use conflicts and may limit the availability of these types of resources into the future.

In 2009, a senator from Flathead County sponsored a legislative bill (Senate Bill No. 486) requiring communities provide an inventory of sand and gravel resources within their jurisdiction. By requiring local governments to identify these resources, ~~it was thought~~ this information ~~would~~ was intended to provide a base upon which future land use ~~regulations policies~~ could be developed to encourage the ~~separation of~~ incompatible uses while ensuring an economically viable source of gravel to facilitate and support future development.¹ Changes resulting from this proposal during the 2009 Legislative session now require all Growth Policies to include a description of sand and gravel resources. As part of Flathead County's Growth Policy Update for the year 2012, this chapter has been added to address these additional requirements and comply with Section 76-1-601 MCA.

Mapping the location and extent of these resources will serve to inform future land use planning efforts in Flathead County and will help ensure the continued availability and accessibility of sand and gravel for the County's future growth and development needs. Due to the limited data available, this chapter is not intended to be an evaluation of existing materials or a directive on where future sand and gravel extraction should necessarily occur. Pursuant to Section 76-1-601(3)(viii) MCA, this chapter intends to identify existing sand and gravel resources located within the planning jurisdiction of Flathead County, and to develop corresponding goal(s) and policies that may aide in future data collection and planning efforts involving sand and gravel resources.

¹ Montana's Growth Policy Resource Book. Montana Department of Commerce Community Development Division. April 2009; pg.33.

Goals & Policies

G.44 Support land use policies that ensure adequate quality and quantity of sand and gravel to meet current and future demands in Flathead County.

In addition to the above stated goal, existing goals and policies found in “Chapter 2 – Land Uses” and “Chapter 8 – Natural Resources” of the Flathead County Growth Policy specifically address sand and gravel resources and should be referenced accordingly. Specifically, G.12 and P.12.1-12.8, as well as G.42 reflect and support the issues addressed in this chapter.

PART 1: History of Sand & Gravel Resources and Extraction in Flathead County

The importance of sand and gravel resources in Flathead County has led to a great deal of discussion over the years; in some cases that discussion has led to zoning map and text amendments and even law suits regarding the evaluation of gravel extraction, and extractive industry in general, within the Flathead County Zoning Regulations (FCZR). The zoning regulations identify “gravel extraction” and “extractive industry” as two distinct yet similar uses conditionally permitted in select, zoned areas of the County. Although the Planning and Zoning Office has no regulatory reviewing authority over the types of uses in unzoned areas of the County, any extractive industry resulting in the removal of more than 10,000 cubic yards of material proposed in these areas is still required to obtain a permit through the Department of Environmental Quality Opencut Mining Program (pursuant to the Opencut Mining Act, 82-4-401 et seq., MCA).

Certain areas of the County address gravel resources and extractive industry more often than others, due in part to the zoning in place but also based upon the location and availability of gravel resources in particular geographic locations. The West Valley, North Fork and West Glacier areas have most recently dealt with gravel extraction issues related to land use. However, this is not to say that other areas of Flathead County have not or will not deal with sand and gravel resource issues in the future. [The West Valley area is one such location; although only a handful of the MDEQ permitted gravel extraction operations are recognized by the County as being active (refer to Map 9.1), the prevalence of residential and agricultural uses has historically resulted in continued conflict over the years]

The West Valley area has been characterized as predominantly residential, following the outcome of a series of court decisions in 2008. The zoning district that applies to much of West Valley is unique in that it identifies “gravel extraction” as a conditionally permitted use; this differs slightly from agricultural and industrial zoning districts that identify “extractive industry” as the type of conditional use under which gravel extraction would be included. Section 76-2-209(2) of the Montana Code Annotated identifies instances where the recovery of gravel and certain extractive industries (such as concrete or asphalt operations) can be conditioned or prohibited in areas zoned for residential uses. In an attempt to address this inconsistency, a 2010 text amendment was approved by the

Flathead County Commissioners [Resolution 955 HE], adding a formal definition of “gravel extraction” to the zoning regulations. This definition included the processing of gravel through crushing, screening, asphalt, wash and concrete plants as well as transportation and stockpiling, and applies to Flathead County as a whole.

Another ~~areapart~~ of the County ~~in which~~ where the issue of gravel resources ~~extraction has been prominent in recent years and extractive industry is prevalent~~ is the North ~~Fork of the Flathead River~~. The North Fork area is rural and remote, accessible only by a gravel road ~~that runs for over~~ extending nearly forty miles north of the City of Columbia Falls to the Canadian border. Mining and extraction has been a controversial issue affecting the ~~region-area~~ since its discovery, as the North Fork is part of a trans-boundary region spanning from British Columbia south into Montana, ~~and The North Fork of the Flathead River~~ serves as the western boundary of Glacier National Park, which has been designated a World Heritage Site and Biosphere Reserve by the United Nations Education Scientific and Cultural Organization (UNESCO). After years of discussion, deliberation and negotiation, a Memorandum of Understanding and Cooperation on Environmental Protection, Climate Action and Energy was signed between the Province of British Columbia and the State of Montana on February 18th, 2010. The Memorandum serves to permanently prohibit coal and hard rock mining as well as oil and gas development in the North Fork region. The governments involved have been working since this adoption to secure and retire existing land leases for gas, coal and mining activities, in an effort to return the ecosystem back to its natural state. A text amendment to the North Fork zoning district was proposed in early 2010 to address the intent of the Memorandum of Understanding. The proposed amendment would have altered the definition of extractive industries for only the North Fork zoning district, limiting the size and scope of operations permitted in this specific area of the County. However, the proposed amendment was tabled and eventually denied by the Flathead County Commissioners following a public hearing in the fall of 2010.

In addition to amendments (proposed and/or approved) described above, the following list of resolutions approved by the County Commissioners deal with gravel extraction and extractive industries in Flathead County. This list should not be considered exhaustive due to the constantly evolving nature of land use issues in the County, but should be viewed as informational, providing a succinct history of the issues relating to sand and gravel resources in the Flathead.

Resolution No. 955 GM (8/17/2005)

Added new subsections 9 and 10 to Section 3.03.020 to define those zoning districts that allow residential uses as residential ones for purposes of Section 76-2-209, M.C.A., to delete Section 3.09.030(14) in order to delete extractive industries as a condition use in R-1 zones, and to amend Section 3.07.010 to allow for estate-type residential development in SAG-10 zoning districts, in order that regulation of operations that mine sand and gravel or that mix concrete or batch asphalt may be allowed, conditioned or prohibited in those residential zones.

Resolution No. 955GU (3/20/2008)

Amend Section 3.03.020 of the Flathead County Zoning Regulations to redefine what districts are “residential” for purposes of applying the zoning regulations to gravel operations, and clarify that AG-40 (Agricultural) and AG-80 (Agricultural) districts are not residential zones for those purposes and (ii) amend Section 4.10.010 of the Flathead County Zoning Regulations to remove the requirement that a Montana Department of Environmental Quality reclamation contract be executed prior to the issuance of a conditional use permit for gravel operations.

Resolution No. 955GY (10/09/2008)

Amend Section 4.10.040 of the Flathead County Zoning Regulations, setting forth the process by which conditional use permits for gravel permits are issued, by deleting the sentence thereof which requires that “When such a plan is also required by the Open Cut Mining Act, the submitted plan shall have been approved by the Department of Environmental Quality” and replacing it with a sentence that states that “When such a plan is also required by the Open Cut Mining Act, the submitted plan must include all information required by the Department of Environmental Quality for such an application.”

PART 2: Existing Sand & Gravel Resources

Gravel resources are commonly found in river valleys where the water table is high, and in alluvial floodplains along streams and glacial deposits.² These areas are generally acknowledged as environmentally sensitive, and are typically designated as floodplain, wetland, or riparian areas having characteristics of prime habitat or sensitive classification. Because gravel extraction must occur where the gravel is located, the potential for conflict is heightened due to the environmentally sensitive nature of these areas and the methods and machinery used to extract the resource.

In the spring of 2010, at the direction of a sub-committee of the Flathead County Planning Board, planning staff researched and compiled available data on surficial soil classifications from the Montana Bureau of Mines and Geology (MTBMG), open cut permits issued through the Montana Department of Environmental Quality (MT DEQ), hard rock and open cut mining permit sections, and the status of existing gravel operations based upon data collected and maintained by the Flathead County GIS Department (through 2010); the end result is the Flathead County Gravel Resources Map included in this chapter (see Map 9.1).

The map identifies the location of known gravel pits throughout Flathead County and provides their operation status – active, inactive, reclaimed or unknown - as of 2010. Of the 142 open cut mining operations permitted in the valley, 130 are currently active, 11 are inactive and 1 has been reclaimed. These locations are overlaid atop the surficial soils

² Sand & Gravel Operations in Montana; www.montanagravel.org

data provided by the Bureau of Mines and Geology, showing the types of soil classification units prevalent throughout the Flathead Valley. The map also includes data points identifying each operation having obtained an open cut or hard rock mining permit through the state Department of Environmental Quality; these permit locations typically correspond to a mapped gravel pit location. Open cut permits include sand, gravel, bentonite, scoria, peat moss and soil extraction; hard rock permits include rock picking, quarrying for talus, ballast as well as mining for gold, leads, copper, zinc and other minerals.³

Although permitted sand and gravel operations are located throughout Flathead County, it should not be assumed that just because an area is void of any existing, permitted extractive industry there are no resources present. If anything, the dispersed nature of resource extraction in Flathead County is beneficial to the economic vitality of the industry and the area in which it is located. Having localized sand and gravel resources in a variety of locations reduces hauling costs to complete infrastructure improvements in these areas and may reduce transportation costs for employees as well.

TABLE 9.1 – MDEQ Open Cut Mining Permits

Permit No.	Operator	Mine Status
110	DEPARTMENT OF TRANSPORTATION	ACTIVE
111	DEPARTMENT OF TRANSPORTATION	ACTIVE
1118	COLUMBIA FALLS INDUSTRIAL PARK	ACTIVE
1119	COLUMBIA FALLS INDUSTRIAL PARK	ACTIVE
112	DEPARTMENT OF TRANSPORTATION	ACTIVE
1125	CLARK ED A	ACTIVE
1133	CRESTON TOPSOIL	ACTIVE
114	DEPARTMENT OF TRANSPORTATION	ACTIVE
1147	DEPARTMENT OF NATURAL RESOURCES STILLWATER UNIT	ACTIVE
1148	DEPARTMENT OF NATURAL RESOURCES STILLWATER UNIT	ACTIVE
115	DEPARTMENT OF TRANSPORTATION	ACTIVE
1151	DEPARTMENT OF NATURAL RESOURCES STILLWATER UNIT	ACTIVE
1152	DEPARTMENT OF NATURAL RESOURCES STILLWATER UNIT	ACTIVE
1160	DEPARTMENT OF NATURAL RESOURCES STILLWATER UNIT	ACTIVE
1161	DEPARTMENT OF NATURAL RESOURCES STILLWATER UNIT	ACTIVE
1162	DEPARTMENT OF NATURAL RESOURCES STILLWATER UNIT	ACTIVE
1163	DEPARTMENT OF NATURAL RESOURCES STILLWATER UNIT	ACTIVE
1164	DEPARTMENT OF NATURAL RESOURCES STILLWATER UNIT	ACTIVE
1181	ESLICK PAUL	INACTIVE
12	ANDERSON LLOYD K	ACTIVE
1207	FH STOLTZE LAND AND LUMBER COMPANY	ACTIVE
126	DEPARTMENT OF TRANSPORTATION	ACTIVE
127	DEPARTMENT OF TRANSPORTATION	ACTIVE
1276	GOOSE BAY EQUIPMENT INC	ACTIVE
1277	GOOSE BAY EQUIPMENT INC	ACTIVE
128	DEPARTMENT OF TRANSPORTATION	ACTIVE
1281	GLACIER HORSE RANCH LLC	INACTIVE
129	DEPARTMENT OF TRANSPORTATION	ACTIVE
1298	GRIZZLY LOGGING AND LUMBER LLC DBA GRIZZLY GRAVEL PRODUCTS	ACTIVE
13	WAGONERS SAND AND GRAVEL	ACTIVE
130	DEPARTMENT OF TRANSPORTATION	ACTIVE
1305	HANSON NEIL	ACTIVE
1315	HAMILTON HOWARD D	ACTIVE

³ Information provided by Craig Jones, MDEQ Hard Rock Mining Permitting Program (May 27, 2011); James Connor, MDEQ Open Cut Permit Program (May 25, 2011).

1320	HANSON NORMAN K	ACTIVE
1321	HANSON NORMAN K	INACTIVE
1337	HELENA SAND AND GRAVEL INC	ACTIVE
1383	KELLER LES	ACTIVE
1387	KLEMPER JOE AND RON	ACTIVE
1388	KLEMPER JOE AND RON	ACTIVE
1407	KNIFE RIVER	ACTIVE
1408	KNIFE RIVER	ACTIVE
1410	KNIFE RIVER	ACTIVE
1411	KNIFE RIVER	ACTIVE
1416	KNIFE RIVER	ACTIVE
142	DEPARTMENT OF TRANSPORTATION	ACTIVE
1422	KRUEGER GARY	ACTIVE
1424	LEIGHTY BROS CONSTRUCTION LLC	ACTIVE
1432	LHC INC	ACTIVE
1440	LASALLE SAND AND GRAVEL	ACTIVE
1478	MANY LAKES EAST	ACTIVE
1494	MURPHYS EXCAVATING INC	ACTIVE
1520	OLSEN RUSSELL	ACTIVE
1527	PLUM CREEK TIMBERLANDS LP	ACTIVE
1552	POTTS LYLE	INACTIVE
1555	PUMCO INC	ACTIVE
1559	RIVERSIDE CONTRACTING INC	ACTIVE
1640	RUSSELL KIMBERLY J	INACTIVE
1645	SCHELLINGER CONSTRUCTION COMPANY	ACTIVE
1648	SCHELLINGER CONSTRUCTION COMPANY	ACTIVE
1650	SCHELLINGER CONSTRUCTION COMPANY	ACTIVE
1658	SCHELLINGER CONSTRUCTION COMPANY	ACTIVE
1659	SCHELLINGER CONSTRUCTION COMPANY	ACTIVE
1661	SCHELLINGER CONSTRUCTION COMPANY	INACTIVE
1668	SCHELLINGER CONSTRUCTION COMPANY	ACTIVE
1669	SCHELLINGER CONSTRUCTION COMPANY	ACTIVE
1679	SCHLEGEL AND SONS CONTRACTOR INC	ACTIVE
1685	SPOKIE GRANT	ACTIVE
1686	SPOKIE GRANT	ACTIVE
1713	SPOKIE ROBERT	ACTIVE
1714	STREET ROBIN	ACTIVE
1717	SILVERTIP PROPERTIES	ACTIVE
1719	STUPAK JAMES	ACTIVE
1720	STW PARTNERSHIP	ACTIVE
1721	SUDAN INC	ACTIVE
1724	SWIFT CREEK CABINS LLC	ACTIVE
1725	SCHWARZ CONSTRUCTION	ACTIVE
1726	CHARLAND STEVE R	ACTIVE
1731	TUNGSTEN HOLDINGS INC	ACTIVE
1733	TAMARACK HOLDINGS LLC	ACTIVE
1734	THORNBERRY RONALD AND ESTHER	ACTIVE
1743	TIMBERLINE READY MIX	ACTIVE
1753	TURNER WAYNE	ACTIVE
1754	TUTVEDT BRUCE	ACTIVE
1757	US FISH AND WILDLIFE SERVICE	ACTIVE
1769	WAGAR JOE	ACTIVE
1783	WOODRING ERIC	ACTIVE
1788	WHITE ROCK AGGREGATE LLC	ACTIVE
1797	WAGONERS SAND AND GRAVEL	ACTIVE
1798	WAGONERS SAND AND GRAVEL	ACTIVE
1807	SCHELLINGER CONSTRUCTION COMPANY	WITHDRAWN
1812	SCHELLINGER CONSTRUCTION COMPANY	INACTIVE
1821	PLUM CREEK TIMBERLANDS LP	DENIED
1846	WHITE ROCK AGGREGATE LLC	ACTIVE
1873	KNIFE RIVER	PENDING
1886	JTL GROUP INC - KALISPELL	INACTIVE
1910	WILKE LAURENCE G	DENIED
1946	SCHELLINGER CONSTRUCTION COMPANY	ACTIVE
1991	DEPARTMENT OF TRANSPORTATION	ACTIVE

1992	GRIZZLY LOGGING AND LUMBER LLC DBA GRIZZLY GRAVEL PRODUCTS	ACTIVE
2	PACK AND COMPANY	INACTIVE
2006	ESLICK PAUL	PENDING
2031	WAGONERS SAND AND GRAVEL	ACTIVE
24	DOANE DON	ACTIVE
25	ROBINSON SAND AND GRAVEL	ACTIVE
3	CITY OF WHITEFISH	ACTIVE
30	JTL GROUP DBA MCELROY AND WILKEN	ACTIVE
305	DOTEN NEIL	ACTIVE
38	NORVELL LINDA EVART	ACTIVE
486	PLUM CREEK TIMBERLANDS LP	ACTIVE
500	PLUM CREEK TIMBERLANDS LP	ACTIVE
515	FLATHEAD COUNTY ROAD DEPARTMENT	ACTIVE
516	FLATHEAD COUNTY ROAD DEPARTMENT	ACTIVE
517	FLATHEAD COUNTY ROAD DEPARTMENT	ACTIVE
518	FLATHEAD COUNTY ROAD DEPARTMENT	ACTIVE
519	FLATHEAD COUNTY ROAD DEPARTMENT	ACTIVE
520	FLATHEAD COUNTY ROAD DEPARTMENT	ACTIVE
521	FLATHEAD COUNTY ROAD DEPARTMENT	ACTIVE
522	FLATHEAD COUNTY ROAD DEPARTMENT	ACTIVE
523	FLATHEAD COUNTY ROAD DEPARTMENT	ACTIVE
524	FLATHEAD COUNTY ROAD DEPARTMENT	ACTIVE
525	FLATHEAD COUNTY ROAD DEPARTMENT	ACTIVE
526	FLATHEAD COUNTY ROAD DEPARTMENT	ACTIVE
54	JTL GROUP DBA MCELROY AND WILKEN	ACTIVE
545	MISSION VALLEY CONCRETE	ACTIVE
55	PACK AND COMPANY	ACTIVE
650	LHC INC	ACTIVE
661	THORNBERRY RONALD AND ESTHER	ACTIVE
671	AC ENTERPRISES LLC	ACTIVE
706	BEASLEY JOE	ACTIVE
721	BROWNN PAMELA	ACTIVE
724	BRASH PROJECTS LLC	ACTIVE
83	HAMILTON HOWARD D	ACTIVE
	RUSSELL WILLIAM M	ACTIVE
	SPOKLIE ROBERT	INACTIVE

TABLE 9.2 – MDEQ Small Miner Exemption Status

PROGRAM	COMPANY NAME	OPERATION TYPE	MINERAL	STATUS
07-011	STAHLBERG BRYAN K	OPEN PIT	TALUS	SHUTDOWN
07-021	JENSEN PAUL	OPEN PIT	SHALE, ROCK	ACTIVE
07-027	JARVIS WILLIAM	ROCK PICKER	RIP RAP ROCK	ACTIVE
07-032	F H STOLTZE LAND & LUMBER CO	OPEN PIT	ROCK	ACTIVE
07-034	GRIZZLY LOGGING & GRAVEL PRODUCTS INC	ROCK PICKER	ROCK	ACTIVE
07-035	KLEMPER JOE & GINA	OPEN PIT	ROCK	ACTIVE
07-036	ANDERSON MASONRY INC	OPEN PIT	DECORATIVE ROCK	ACTIVE

TABLE 9.3 – MDEQ Operating Permits (Hard Rock Mining)

PROGRAM	MINE NAME	OPERATION TYPE	MINERAL	STATUS
00045	ESSEX QUARRY	OPEN PIT	BALLAST, RIP-RAP	ACTIVE
00123	HOG HEAVEN MINE	OPEN PIT, UNDERGROUND, VAT LEACH	COPPER, GOLD, LEAD, OXIDES, SULFIDE, ZINC	ACTIVE
00151	WEAVER GRAVEL QUARRY	OPEN PIT	TALUS ROCK	ACTIVE
00167	MULTIPLE QUARRY PERMIT	MULTIPLE QUARRY SITES	ROCK	ACTIVE
00175	MULTIPLE QUARRY PERMIT	GENERAL QUARRY	ROCK	ACTIVE

This page left blank for formatting purposes.

DRAFT